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Comments opposing RM-9267

May 17, 1998

Office of the Secretary,
Federal Communications Commission,
Room 222,
1919 M Street NW,
Washington, DC 20554

Dear Commissioners,

I am writing to oppose the petition by the Land Mobile Communications Council to reallocate a significant portion of the 420–450 MHz Amateur Radio Service band to the Private Mobile Radio Service.

• I am currently the President of the Raleigh Amateur Radio Society (North Carolina), an association of 325 Amateurs. I have been a licensed Amateur since 1965, and during most of my Amateur career, I have concentrated on the VHF/UHF aspect of the service. I have dedicated a great deal of my Amateur activity to public service and emergency communications, including the Amateur Radio Emergency Service, and the National Weather Service's SKYWARN program. I am a daily user of the UHF spectrum.

• In its petition, the LMCC pleads the case that the Private Mobile Radio Service is a valuable radio service, but that it is overshadowed by larger, more visible radio services. This lack of prominence has put them at a disadvantage in the competition for scarce spectrum resources, they say.

The Amateur Radio Service could make the same claim, but without the long list of large companies and resources behind it mentioned throughout the LMCC petition. We have no powerful, well-financed lobby to protect our interests.

• No doubt, PMRS users and LMCC members could use additional spectrum. But should it come at the expense of Amateur Radio? While PMRS is the communications service of large and small business, Amateur Radio is the communications service of the ordinary citizen, the only serious communications outlet for non-commercial radio operation. We are the people.

• The 420–430 and 440–450 MHz UHF bands are essential resources for us. Our 144–148 MHz VHF allocation is overcrowded. Even here, in relatively rural North Carolina, there is no space on that band for additional repeaters near the metropolitan areas. For years, we have been turning to the 440–450 MHz spectrum for expansion. In the larger metropolitan areas of the country, that UHF spectrum is full. Meanwhile, the 420–430 MHz band carries our only non-microwave television spectrum, along with significant linking and control frequencies used in conjunction with analog and digital systems on VHF and UHF. Also, this is the lowest frequency band available for high-speed digital networking.

The Raleigh Amateur Radio Society operates two UHF repeater systems, on 444.525 MHz and 444.95 MHz. Many of our members, myself included, have invested a considerable amount of money in equipment to operate through these and other UHF repeaters -- equipment that not only brings its owners no direct revenue, but is prohibited by law from bringing revenue to its owners in **any** form.

• Amateur Radio's primary contribution to the public comes from Emergency and Public Service communication. UHF repeaters are an important element of that service. Here are some examples.

We regularly use UHF to relay SKYWARN spotter reports from the Greensboro/ Winston-Salem area to the National Weather Service office in Raleigh.

Recently, the Newport, NC, NWS office suffered a failure of their Doppler RADAR system. During the outage, a line of severe thunderstorms developed in the Newport coverage area, and a tornado watch was issued. The Raleigh NWS office provided backup RADAR coverage for the Newport office. But, Raleigh's RADAR resolution was limited due to the great distance involved. Amateur Radio operators used UHF to link SKYWARN spotters in the Newport area directly to the Raleigh RADAR operator, more than 100 miles away. This allowed the Raleigh RADAR operator to hear immediate, first-hand verification of the weather the Doppler system was indicating.

When Hurricane Fran swept through North Carolina in 1996, this same UHF Amateur Radio link provided uninterrupted communications between the Wilmington and Raleigh NWS offices during the peak of the storm.

Much of our public service activity is accomplished with low power, handheld equipment. Although the VHF spectrum is full, there are still many areas where handheld coverage is poor. We rely on UHF to provide coverage in those areas, through complete UHF repeater systems, or by crossband mobile links between UHF handhelds and VHF repeaters.

The Research Triangle Park area, located between Raleigh and Durham, is a good example of how UHF fills in the VHF gap. The VHF repeaters serving Raleigh and Durham do not provide reliable handheld coverage in this area. But, since its broad streets carry little traffic on weekends, it is a very popular place for walk-a-thons and bike-a-thons sponsored by the March of Dimes, the Multiple Sclerosis Society and many other charitable organizations. Amateur Radio operators provide the communications support for these events, and without UHF, this would be much more difficult.

• The LMCC makes some compelling arguments showing a strong commercial need for additional radio spectrum. However, **every** user of the limited usable radio spectrum makes this claim. All of them find Amateur Radio's seemingly less important spectrum use a tempting target. Suppose that, one day, all the Amateur Radio spectrum were reallocated to commercial use. Would the needs of commercial services be satisfied? Probably not. Commercial users would still clamor for more spectrum, and the private citizen's most significant gateway to the radio spectrum would be gone.

We can make an analogy between Amateur Radio spectrum and the system of parks, including municipal, state and national parks. Parkland, especially urban parkland, is territory that would be valuable for commercial development. With some difficulty, and at some cost, we maintain it for public use against the pressure of commercial development. Would commercial developers like to build on the property of New York's Central Park, or Chicago's Grant and Lincoln Parks? Could the Federal Government use the space now devoted to the Mall in Washington?

As the parks provide citizens access to open land, Amateur Radio provides access to relatively unrestricted spectrum. Other radio services (CB, Family Radio) provide the public with very limited access to a tiny bit of radio spectrum, but Amateur Radio is the only place that individual citizens can turn to for a broad range of non-commercial, non-broadcast radio applications, including experimentation. The only price of admission to the Amateur Radio spectrum is passing an exam for an Amateur Radio license, something non-technical people can do with a minimum of study.

And, while we strive to make good use of all our resources, a commercial yardstick for efficiency cannot be applied fairly to Amateur Radio. It's a financial problem. Since each Amateur Radio operator buys his or her own equipment, changes in technology that obsolete large categories of equipment pose an incredible burden, and are adopted gradually. And it's an operational problem. Outside of public service and contest operations, Amateur Radio communication is not based on brief, "to-the-point" exchanges of information. People enjoy some leisure in the parks, and in their Amateur Radio communication.

• The LMCC appears aware of Amateur Radio's value and record of service. Rather than proposing total elimination of Amateur Radio in the selected spectrum, they propose sharing the band, with Amateur Radio taking a secondary, non-interfering position. They make no suggestion about how this arrangement might work.

Amateur Radio and PMRC shared spectrum is unworkable, and LMCC's offer to share spectrum **should not tip the balance** of this request in their favor.

Amateur Radio is currently secondary to the US Government in the 420-450 MHz band. Here in the southeast, the government's principle use of the spectrum is for RADAR. Amateur signals do not disrupt the RADAR operation at all, and while the RADAR signals do occasionally disrupt Amateur communications, the effect is minor.

In the 440-450 MHz band, most Amateur communication, and most PMRC communication, would use the same mode: narrowband FM. In major metropolitan areas, each PMRC system placed on the air would merely displace an Amateur system. In the 420-430 MHz segment, Amateur Radio is primarily Television, and any PMRC signals appearing in that spectrum would make Amateur TV unusable.

• The LMCC suggests the possibility of making some spectrum available to Amateurs in the 1400 MHz area. While we appreciate the thought, it isn't much of a trade. The LMCC points out that their own need for 450 MHz spectrum is based on immediate equipment availability. They say they could use existing equipment at 450 MHz, while hardware at 1400 MHz and above has not been developed to suit their needs.

Meanwhile, Amateurs would be left with useless UHF equipment bought by personal funds. No equipment is available to suit Amateur needs in the 1400 MHz area, either. The large PMRC market is much more likely to spur hardware development for those frequencies than the Amateur market, but not equipment readily usable by Amateurs.

Conclusion:

The LMCC has requested a lot besides the Amateur allocation between 420-450 MHz. On that I have no comment. I urge the Commission to deny the LMCC's request to reallocate the Government/Amateur Radio spectrum between 420-450 MHz.

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